

Listing of the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1-7. (Cancelled)

8. (Currently Amended) A method for synthesizing a nucleic acid molecule from a crude preparation comprising RNA and double-stranded DNA, said method comprising:

a) adding to said crude preparation one or more DNA polymerases, and one or more peptides or polypeptides having ribonuclease activity, wherein said peptides or polypeptides having ribonuclease activity are capable of degrading single-stranded RNA and are thermostable; and

b) incubating said mixture under conditions sufficient to synthesize a nucleic acid molecule complementary to all or a portion of said double-stranded DNA and under which said peptides or polypeptides having ribonuclease activity simultaneously degrade said single-stranded RNA.

9. (Previously Presented) The method according to claim 8, wherein said peptide or polypeptide having ribonuclease activity is selected from the group consisting of: RNase A, RNase T1, RNase S, RNase B, RNase C, RNase T2 and enzymatically active fragments, variants, derivatives or mutants thereof.

10. (Previously Presented) The method according to claim 8, wherein said mixture further comprises one or more components selected from the group consisting of: a) at least one nucleotide; b) at least one suitable buffer for nucleic acid synthesis; and c) at least one primer.

11. (Original) The method according to claim 8, wherein said DNA polymerase is thermostable.

12. (Previously Presented) The method according to claim 11, wherein said thermostable DNA polymerase is selected from the group consisting of: Taq DNA polymerase, Tne DNA polymerase, Tma DNA polymerase, Tth DNA polymerase, Tli DNA polymerase, Pfu DNA polymerase, Pyrococcus species GB-D DNA polymerase, Pwo DNA polymerase, Bst DNA polymerase, Bca DNA polymerase, Tfi DNA polymerase and enzymatically active fragments, variants, derivatives or mutants thereof.

13. (Original) The method according to claim 10, wherein one or more of said nucleotides are detectably labeled.

14-55. (Cancelled)

56. (Previously Presented) The method of claim 8, wherein said crude preparation is from any cell or tissue selected from the group consisting of bacteria; insect; bird; fish; plant; yeast; prokaryote; eukaryote; and mammals.

57-69. (Cancelled)

70. (Previously Presented) A method according to claim 8, wherein said double-stranded DNA comprises an expression vector.

71. (Previously Presented) A method according to claim 8, wherein said double-stranded DNA comprises a cloning vector.

72. (Previously Presented) A method according to claim 8, wherein said double-stranded DNA comprises genomic DNA.

73. (Previously Presented) A method according to claim 8, wherein said double-stranded DNA comprises a plasmid or a cosmid.

74. (Previously Presented) A method according to claim 8, wherein said double-stranded DNA comprises viral DNA.

75. (Previously Presented) A method according to claim 8, wherein said double-stranded DNA comprises phage DNA.